

MDE GUIDANCE ON WASTEWATER FLOWS FOR USE IN DESIGNING ON-SITE SYSTEMS

ESTABLISHMENT	GPD PER UNIT
AIRPORT , per passenger	5
Per employee	15
(Add for food service facility)	
ANIMAL SHELTER/KENNELS/VETERINARIAN	
Per run (pen, cage, stall etc.)	25
Per grooming station	250
Per procedure room	250
(Consider Waste handling & strength in design)	
ASSISTED LIVING/HOMES FOR THE AGED , per bed space	100
(Consider more flow for Assisted Living facilities that provide more extensive care)	
BARBER SHOP , per seat (station)	50
BEAUTY SALON , per station	250
Consider potential impacts of any chemicals discharged to the onsite system and the potential impacts of backwash from water treatment units.	
BOWLING ALLEY	
Per lane, no bar/food	75
Per lane, with bar only	125
Per lane, bar & food	200
CAMPS, CAMPGROUNDS, & TRAVEL TRAILER/RV PARKS	
Public Campground, per travel trailer space, w/water and sewer hookups	175
Public Campground, per travel trailer space, w/no water & sewer hookup	150
Youth overnight camp, per camper	50
Labor camp, per person	50
Luxury camp, per camper	100
Day camp, per person (add flow for meals, showers or pools)	15
For information on the discharge of RV pump-out wastewater into an OSDS (septic system), please contact the Groundwater Permits Division at (410) 537-3778.	
CHURCH-ASSEMBLY HALL	
Per sanctuary seat	3
With private kitchen (members only)	5
With commercial kitchen (open to general public,	
With Food Service License: see “Food and Beverage Service Facility”	

Classroom space or meeting rooms intended for daily use, per seat	15
(For church space not in a separate building, allocated to Sunday school and other occasional use, an additional flow factor need not always be applied, as long as seating capacity in these areas does not exceed the number of sanctuary seats.)	
DAY CARE , per patron	15
DRIVE IN THEATER , per car space	5
FACTORY (MANUFACTURING PLANT)	
Per employee/per shift	15
Add for showers per employee	10
FAIRGROUND , per person	5
FOOD and BEVERAGE SERVICE FACILITIES*	
Banquet room, per seat (assoc. w/restaurant)	5
Banquet room, per seat, exclusively banquet facility	25
Bar/Tavern/Pub, per bar seat	25
Bar/Tavern/Pub, per table seat	50
Convenience Store, Bakery, Carryout, Deli, w/ <u>no</u> seating:	
Without public restrooms	0.40 gpd/ft ² 600 minimum
With public restrooms	0.75 gpd/ft ²
With seats, add flow	Use "Restaurants"
Grocery Store	0.40 gpd/ft ²
Restaurants: 12 hour operation, per seat	50
24 hour operation or fast food, per seat	75
Interstate or major highway, per seat	150
Tasting Room for Winery or Brewery w/public bathrooms (Add for food service, special events or other amenities)	400 minimum

If wine or beer process wastewater is proposed to be combined with domestic wastewater, or planned for a dedicated onsite system, a Groundwater Discharge Permit may be required. Please contact the Groundwater Permits Division at (410) 537-3778.

* Consider waste strength in design

FUNERAL HOME (Domestic wastewater only) 0.62 gpd/ft²

For any embalming disposal contact the Groundwater Permits Division at (410) 537-3778

GOLF COURSE with snack bar (limited food service)

Per 18 holes 3500

Per 9 holes 1500

(Add for full food service and bar seating; See “Food Service Facility”)

LAUNDRY/COIN-OPERATED

Per machine/per 24 hours 600

If # of machines unknown 7.36 gpd/ft²

MARINAS *

Wet slip with toilet facilities (gpd/slip) 20

Wet slip with toilet facilities and bathhouse 32

Dry slips with toilet facilities 7

Dry slips with toilet facilities and bathhouse 11

Launch Ramp only, per parking space 10

*Add for other amenities such as food service, laundry service, swimming pool, etc.

Pump-out station sizing: 35 gpd per slip, or as dictated by DNR. Storage volume only, no discharge into OSDS

MEDICAL FACILITIES

Dental office, per chair 150

Doctor’s office 0.62 gpd/ft²

Hospital, per bed 350

Nursing home, per bed 200

Physical therapy 0.62 gpd/ft²

MOBILE HOME PARKS, per lot 300 minimum

MOTEL-HOTEL-BED & BREAKFAST

Per unit, no food, no kitchen 125

Per unit, with food/kitchen in room 200

Bed and Breakfast, per Bedroom 150

OFFICES

Per employee/8 hr. shift 15

If # of employees is unknown 0.18 gpd/ft²

PARKS

Per person, with toilets provided 10

Add for showers 10

Visitor Center, per parking space 45

PRISON/JAIL	
Per bed space	125
Per employee/shift	15
RESIDENTIAL UNITS (APARTMENTS/CONDOMINIUMS)	
Per bedroom	150
Rooming/boardings, per bed	75
REST AREA (HIGHWAY)	
State highway rest area (mini-station)	2000 minimum
SCHOOLS & COLLEGES (PER STUDENT)	
Without food or showers	15
Add for food	5
Add for showers	10
Boarding	100
Day care, per student	15
STORE/COMMERCIAL SPACE	0.10 gpd/ft ² 400 minimum
SWIMMING POOLS	
Per swimmer (add for food service)	10
THEATER OR SPORTS ARENA, per seat (add for food service)	5
THEATER-DINNER, per seat	20
WAREHOUSES	0.06 gpd/ft ²

NON-DOMESTIC PROCESS WASTEWATER

If a facility discharges non-domestic process wastewater, the facility may require a Groundwater Discharge Permit. Please contact the Groundwater Permits Division at (410) 537-3778.

For example:

- Vehicle Maintenance facilities
- Car Washing facilities
- Dry Cleaners
- Butcher Shops
- Food processing facilities

[Disposal options for food processing and other nutrient containing wastewater, such as Wineries, Breweries and Milk Products processing facilities, are addressed in a separate MDE memo “Options for the Management of Food Processing Wastewater”.]